

SEQUENCE LISTING

<110> Recipon, Herve
 Sun, Yongming
 Chen, Sei-Yu
 Liu, Chenghua
 Turner, Leah

<120> Compositions and Methods Relating to Lung Specific
 Genes and Proteins

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<150> 60/243,461

<151> 2000-10-26

<150> 60/252,055

<151> 2000-11-20

<150> 60/252,496

<151> 2000-11-22

<160> 142

<170> PatentIn Ver. 2.1

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 <222> (165)
 <223> a, c, g or t

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 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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 <211> 511
 <212> DNA
 <213> Homo sapiens

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 <211> 61
 <212> DNA
 <213> Homo sapiens

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<210> 20
 <211> 198
 <212> DNA
 <213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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<211> 1155
<212> DNA
<213> Homo sapiens

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<211> 1311
<212> DNA
<213> Homo sapiens

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<222> (1276)
<223> a, c, g or t

<220>
<221> unsure
<222> (1278)..(1297)
<223> a, c, g or t

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<210> 25

<211> 2593

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (378)..(442)

<223> a, c, g or t

<400> 25

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<210> 26

<211> 594

<212> DNA

<213> Homo sapiens

<400> 26

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<223> a, c, g or t

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<223> a, c, g or t

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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 600
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnncatcac 660
aacacttgct caaactaaaa aattctaggc caggcgctat gcctgtagtc ccagcaattt 720
gggaggcaag gtg 733

<210> 28
<211> 553
<212> DNA
<213> Homo sapiens

<400> 28
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ctcgattact acatggtgaa ttgaagttcc agtagagagg gagttgagct gatactgagg 180
agataaatac ccatcactgt atacatctac ttcttgaat ttgcaaggga accagtcaac 240
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ggactctgga gcccaagaga tgtgtagttt ccatttttga gccattttct ttgataaata 360
agtagtgagg ctgccattct tgtcaaagtt gaggaccaca accttactca tgaaactgaa 420
agattgtttg ttatgaggag ttctgtttga gccatacaag caatatatcc tttttaaaga 480
aatgtatccg gaattctagg tgttcattgc tccaagccat gtgcagaata aaaagaaaac 540
aaaaaacaaa aaa 553

<210> 29

<211> 589
<212> DNA
<213> Homo sapiens

<400> 29
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cactctgtct cgattactac atggtgaatt gaagttccag tagagaggga gttgagctga 180
tactgaggag ataaatcccc atcactgtat acatctactt cttggaattt gcaagggaac 240
cagtcaacag atttttcaag ccttataagt ttatctgcct gagaagttca ccagctacat 300
aacatcttgg actctggagc ccaagagatg tgtagtcttc attttggagc cattttcttt 360
gataaataag tagtgaggct gccattcttg tcaaagttga ggaccacaac cttactcatg 420
aaactgaaag attgtttggt atgaggaggt ctgtttgagc catacaagca atatatcctt 480
tttaaagaaa tgtatccgga atcttaggtg ttcattgctc caagccatgt gcagaataaa 540
aagaaaacaa aaaacaaaaa aaaaaaaaaa aaaaaaaaaa ttggcggtc 589

<210> 30
<211> 487
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (305)..(374)
<223> a, c, g or t

<400> 30
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gtttgttaag cttcttcctg tttacattat tttctctact gagggatttt tcagggtatta 300
tttccccccc nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
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gaaaatt 487

<210> 31
<211> 330
<212> DNA
<213> Homo sapiens

<400> 31
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gtgagcttag gggaaaagga tgatgatgag atttcatgct gtggtctgca tctttacaaa 180

ggtctcacag tagcctttct aaggaataa ttttgaaacc attgcaactg attgaagcac 240
 ttatctatct tccaagaggg ttaatagtaa ggggtggagg caaattactt tgagcttgag 300
 ccaagaggaa taaatatagc atggaacca 330

<210> 32
 <211> 574
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (523)
 <223> a, c, g or t

<400> 32
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 ctccctgcca gcaacacctg tgggtccac tgagtgcctg gaagccctgg atggaggaca 180
 agggcttgca ttcaggacaa gcctgggaaa gaaatcttga tctgagaaat ccaggctgca 240
 tttatccagc taatgtggct gaactgaacc cttaatggg tcagggtgag cttcccggt 300
 cagcaggaat gcctgagaac aggaaagaat ttgatctgag ggtctgacc tcaccctgc 360
 attttacagc ctcccttcc agcattcttt tattactatt gctgttgta ttattatgat 420
 gccttctgga gcctccttc attccaacag ttacatctc ttatttgccc tattggcaat 480
 tagtcttctt tggacatgct tggtagtttt ttatgcgcta atntttctac catagcttga 540
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<210> 33
 <211> 350
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (160)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (164)
 <223> a, c, g or t

<400> 33
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 cgggaccttc agtggaccgg cagggttcca gagggccgcn cgngccgccc ccgcccctcat 180
 tgcctagcct gccaggtaag cagccccagc gccgtgccgc cgcgacctct actccttcgg 240

ggaggggtcgc gctcacgtct gaagtgggag caatgcaccg ggacagggac acctcctagg 300
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<210> 34
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 34
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 gaacgccttc acttccagat ttctaagtgg ggctcaggaa ttataataga tgtccacaga 120
 ctgcatggtc ttctctctcc acaacacgca gacactatta gaagtaaaag ccacgtgtcc 180
 tcaagagggc aaggcaaagc atcttcagat gtctctgccc ttaaagcaca cqcqttctqc 240
 tctgcgacga agcaggacaa ggaggacagg gacctgcacc tccggaggcc cgcacctacg 300
 aagatagcgg gctcgggacc ttcggtggac cggcagggtt ccagaggccc gcgcgcgcc 360
 gccccgccct cattgctgag cctgccaggt aagcagcccc agcgcctgac ccgcgcgacc 420
 tctactcctt cggggagggt cgcgctcacg tctgaagtgg gagcaatgca ccgggacagg 480
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 cac 543

<210> 35
 <211> 558
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (180)..(202)
 <223> a, c, g or t

<400> 35
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 ctctgcctgc tgtatattca cttctcctag gttctctctg gcctgcctcc catctcagcn 180
 nnnnnnnnnn nnnnnnnnnn nnggetaate ttgataaat tcccacataa tctgcaatga 240
 acagagaaac tctgtaggaa tgacttggtg ctaccccacc acagtccaca tcttgggaca 300
 gccgctcagc ctggagcccg tactagaagg aagaatgtcg atgttaaate tctccctcat 360
 tcaagacaat gtggcctcaa tattagatgc cttttcacct ttattttctg aatgtctgtt 420
 tacatctgag ttcactcgtg gaaaaagtct gggtagagag gtaggtcggg gtccccttgg 480
 ccttgagaac agctggccag gcggagccca cctctggttt ttctggcttt gtgacagagt 540
 gaccactagg gggtgaca 558

<210> 36
 <211> 739
 <212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (590)

<223> a, c, g or t

<220>

<221> unsure

<222> (595)

<223> a, c, g or t

<220>

<221> unsure

<222> (601)

<223> a, c, g or t

<220>

<221> unsure

<222> (603)

<223> a, c, g or t

<220>

<221> unsure

<222> (610)

<223> a, c, g or t

<220>

<221> unsure

<222> (685)

<223> a, c, g or t

<220>

<221> unsure

<222> (691)

<223> a, c, g or t

<400> 36

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gccctgagca tgctgccaga gccctgaaat atagctgtgt attgttaagt ctctttgcag 180
tctgtgttct ctctgataa cttctattg ccttcttgtc tctttaaaaa tcacatattg 240
agcttttcat gcacttgcc cttattttcc caagctcttc cagttcatac ctctcatcc 300
ccccaggtct atcagtgcct cgggggtttg aacctctggg gtacactgat ggtcacccaa 360
catgggaaga acaccatgct tctggggacc ttggatctcc ctgctctgtt ttcctttctg 420
tgggctccca gctcctagag ctcaacatgc ctttatectt ttcctctctc cctcagatgg 480
aaacagttct ggcaaaaata tttaaaatag acattataga acttaaaggt gacatagttc 540
aggggtagtt gacacattta tctcataaca aagaaagaat tcgtagcatn aaaancagat 600

nonacagatn ctcttttttg aagcgactgt cttcccagaa ccctaaaatc atgcagtggt 660
 agcttttagg gagtgagaca aggtnccttt ngccagctgg cccccacgga gcaagaaatg 720
 gcattctgtc tgatggggg 739

<210> 37
 <211> 821
 <212> DNA
 <213> Homo sapiens

<400> 37
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 gagacctccg tggcaagtcg ttggcccggg gacagaaagg cctgtactgg attctgggtt 120
 gccttgagca tgctgccaga gccctgaaat atagctgtgt attgttaagt ctctttgcag 180
 tctgtgttct ctctgataa cttcctattg ccttcttgte tctttaaaaa tcacatattg 240
 agcttttcat gcacttgctt cttattttcc caagctcttc cagttcatac ctctcatcc 300
 cccaggtct atcagtgtt cgggggttgg aacctctggg gtacactgat ggtcacccaa 360
 catgggaaga acaccatgtc tctggggacc ttggatctcc ctgctctgtt ttcctttctg 420
 tgggctccca gctcctagag ctcaacatgc ctttatectt tccctctctc cctcagatgg 480
 aaacagttct ggcaaaaata tttaaaatag acattataga acttaaagggt gacatagttc 540
 aggggtagtt gacacattta tctcataaca aagaaagaat tcgtagcatc aaaaccagat 600
 gccacagatt ctcttttttg aagcgactgt cttcccagaa ccctaaaatc atgcagtggt 660
 agcttttagg gagtgagaca aggtgccttt ggccagctgg cccccacgga gcaagaaatg 720
 gccatcttgt ctgatggggg ccacccgggc cacacccgt tactgttct gacaggatca 780
 gcctctgctg gaccttggga cccttatttt tgtctactc c 821

<210> 38
 <211> 588
 <212> DNA
 <213> Homo sapiens

<400> 38
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 aggcacccac atttcccccc atctcttcat tcttacagct tgaactgtta catttaggca 120
 catagatggg ggggaaaaga ttataaagaa attgactaaa aacttggaat ttatttttac 180
 ataaaattgt catatttgat tttgcacgtt acaaatttga aaattaaaat agcattagga 240
 atagtttatg tttagaaata gatgctttat accaaatagc ttgaagtacc ttggaatagt 300
 gatcttacag aatgcagggg tcacatttgc cctgtatat ttaaataat tttcccagga 360
 tttacacact tttccatata ttttaagtaga ggaatataac aataactaca agctacttca 420
 tatatctcac atctctactg ccaaagtttg tctaccagcc ttttccagct cagtcattt 480
 taatcatacc tcatttcttt tactttattt tgtttgcttt caatatgaaa aagggtttat 540
 cctatatgga gaaaacagac agaatgtcgt acattagctc taagtagt 588

<210> 39
 <211> 580
 <212> DNA

<213> Homo sapiens

<400> 39

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aagacttata cattataagg tcagctgttt taccttacta tttttcctga tcctcatgga 60
atgtgtgtgc tagtgtgata caaaggaaga ttttacaccc caaacagtga aataatttta 120
aaaacaaaac gcacatagaa cacctacatg gtgttatattt cttcaaatca gtgtaataata 180
cacaggctca gcagtctaga catcaacatt taaactaatt taaatgtatt aatcccttct 240
tttttcatgc aattgcaatt tccagatatt taaagatgtg agcattttta cacatttgct 300
gataaaattg gaatcatttc attttaattg atacctctaa aaatcatctc ttcagcccga 360
ttgtattttc cagacctgac ctttgagtca gaagagagcc aatttgcaaa taaaggggtg 420
tctcatggct gcctgctgag ggactgttca taagcctttt tgtgaggggtg attcaatagc 480
tccattctgg tacagtgagt cctgcccgtt ttagccattt gcctataact gttttactgt 540
tctgtgaata atttttattt atcttaatat tattttcatg 580
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<210> 40

<211> 617

<212> DNA

<213> Homo sapiens

<400> 40

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aagacttata cattataagg tcagctgttt taccttacta tttttcctga tcctcatgga 60
atgtgtgtgc tagtgtgata caaaggaaga ttttacaccc caaacagtga aataatttta 120
aaaacaaaac gcacatagaa cacctacatg gtgttatattt cttcaaatca gtgtaataata 180
cacaggctca gcagtctaga catcaacatt taaactaatt taaatgtatt aatcccttct 240
tttttcatgc aattgcaatt tccagatatt taaagatgtg agcattttta cacatttgct 300
gataaaattg gaatcatttc attttaattg atacctctaa aaatcatctc ttcagcccga 360
ttgtattttc cagacctgac ctttgagtca gaagagagcc aatttgcaaa taaaggggtg 420
tctcatggct gcctgctgag ggactgttca taagcctttt tgtgaggggtg attcaatagc 480
tccattctgg tacagtgagt cctgcccgtt ttagccattt gcctataact gttttactgt 540
tctgtgaata atttttattt atcttaatat tattttcatg cataataact ataataaaca 600
accctgtcag tgaaaaa 617
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<210> 41

<211> 234

<212> DNA

<213> Homo sapiens

<400> 41

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atacatacca aaccaaaaca tgccatgggt caatttgtgt actttgggtc tccattttct 60
tgtttgggtc aacattacgt catctttata aaataaattg agagaaaaaa tttataagaa 120
agacttaagt atgttccaag aaaatatgcc atttacccta gaggttgaaa tataatcaat 180
tattcaaaac ttgcatgcta tatatacaag aactgccag actctggaga tttta 234
```

<210> 42

<211> 147

<212> DNA

<213> Homo sapiens

<400> 42

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ggaagtgggtg tagacactcg agaagtgaaa tgcagatatg tctgccattc agactgatag 60
gttcctttcc tctgtggaaa tgaggttatt ttagatcatt gttgaggtag atgcaggaat 120
ctgtccctcg gcttttttgt ttgtttt                                     147
```

<210> 43

<211> 609

<212> DNA

<213> Homo sapiens

<400> 43

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atgttgtect ctgcacgtgg aggagcagag gagtcagaga gggcagagcc gcctctgagg 60
tgggctttcc ttctcttggg cctaggcact gtggttggcg tggacgagag cactgctttc 120
tcatggcctg tgtgtgacat gtgtggcaac gggagattgg aacagaggcc ggaagacaga 180
ggcgcctttt cctgtgggga ctgctcccg gtgtgcacat ctctgttct caagaggcac 240
ctgcaggctc tcctggactg ccgctcaaga ccgcagtga gagtgaaggt caagctgttg 300
cagcgcagca tttcctccct gctgaggttt gccgccggtg aagatggggg aagtgcaggg 360
ggcccagccc agggggccgc acactcagta gcctgcatga gcaactcatc cccagaggaa 420
gccccactc ccaaattgtg tctattacaa cccatcccac taggaagtgg tgtagacact 480
cgagaagtga aatgcagata tgtctgccat tcagactgat aggttccttt cctctgtgga 540
aatgaggtta ttttagatca ttgttgagg agatgcagga atctgtcccc tggctttttt 600
gtttgtttt                                     609
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<210> 44

<211> 538

<212> DNA

<213> Homo sapiens

<400> 44

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aatggctcag gatatgtggg ccaggcccag ttttaagtga gtttccttgt tttcgtggtt 60
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aggaaggagg gttcttgagg gatgggggct tgctcggtaa agctaaagga tgtatagctg 180
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tgcacagggg cccagcattg gctgaggagg ctgtggaggg gagggagcag ggcagggtgc 480
gtgcaaggct ttgagactca ggtcaggcct ccaggactgc gttttgcaga tgaaccca 538
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<210> 45

<211> 1348

<212> DNA

<213> Homo sapiens

<400> 45

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aggaaggagg gttcttgagg gatgggggct tgctcggtaa agctaaagga tgtatagctg 180
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ggcaaacaaa aggaagtaaa ataatgtg 1348
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<210> 46

<211> 237

<212> DNA

<213> Homo sapiens

<400> 46

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acccccaaact tcttagccct tccctgctgt cctcatttcc accatagcag tcttttgccc 60
ttcccctagg tacccctgtg tatccttggt taacctcttt ctgaccaccg acctctgccc 120
acccaagccc ttgaacaata tttttcttga tctttttacc tgctcatggt tctttatttt 180
gtctgcttat gtggccattt ggcttttctg tggcatagat gaagaagggt atgactg 237
```

<210> 47

<211> 503

<212> DNA

<213> Homo sapiens

<400> 47

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ccacgcttgg cagactttat ttcttaaaga ttgccgtctt actcagcacc ttqagaact 60
cacaaataaa tgccccagag tttcagagaa agccagccat taaaatcttt tagggggatc 120
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cagagaagat gagttaaatt ggaatggact tgaaaacact gatttagttg gatttatgga 180
 tcacagtcac gaaaaggtaa agataccaac ttgttttggt aatttaactt ttattcctta 240
 cttttttgcc cctactgttt gtaattccta ctttataatg aaatccttct tgtgacttat 300
 agaaattaac tggggaaaat gtttttctgt tctccatttc ctttaagttt gtttttagat 360
 acactgcatt gcaagtatgt gtggtacagt aaaatgttgc taattgtatc tgcgctgata 420
 acatgccatt tgetgtaggt cagtttccta cccctccccc caactattcc tagccagtg 480
 tagcatgctt cttacttcca aat 503

<210> 48

<211> 656

<212> DNA

<213> Homo sapiens

<400> 48

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 gaagatgagt taaattggaa tggacttgaa aacactgatt tagttggatt tatggatcac 180
 agtcatgaaa aggtaaagat accaacttgt tttgtgaatt taatctttat tccttacttt 240
 tttgccctta ctgtttgtaa ttcctacttt ataatgaaat ccttcttgtg acttatagaa 300
 attaactggg gaaaatgttt ttctgttctc catttccttt aagtttggtt ttagatacac 360
 tgcattgcaa gtatgtgtgg tacagtaaaa tgttgctaatt tgtatctgcg ctgataacat 420
 gccatttgcg gtaggtcagt ttcctacccc ctcccccaac tattcctagc cagtggtagc 480
 atgcttctta cttccaaata tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg 540
 cgctgtgtg tatcaacaat gtgatcctaa aataaaagaa tgacatatat ttgacattat 600
 ttacatacta aatatggggag cacataatca attacagaat aaaatccaat tttgca 656

<210> 49

<211> 362

<212> DNA

<213> Homo sapiens

<400> 49

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<210> 50

<211> 3876

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (3450)

<223> a, c, g or t

<400> 50

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<210> 51

<211> 492

<212> DNA

<213> Homo sapiens

<400> 51

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acacacctac agatgatgga actaaacctt cttgagtggc atcttcagga tgccaatcca 180
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<210> 52

<211> 1151

<212> DNA

<213> Homo sapiens

<400> 52

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1151

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<210> 53
<211> 623
<212> DNA
<213> Homo sapiens

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<400> 53
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acaaattaca caggggaaca aga
623

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<210> 54
<211> 1848
<212> DNA
<213> Homo sapiens

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<400> 54
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<210> 55

<211> 434

<212> DNA

<213> Homo sapiens

<400> 55

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<210> 56
<211> 493
<212> DNA
<213> Homo sapiens

<400> 56
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tatgtggaat tgt 493

<210> 57
<211> 465
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (288)..(308)
<223> a, c, g or t

<400> 57
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<210> 58
<211> 894
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (791)
<223> a, c, g or t

<400> 58

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<210> 59

<211> 1587

<212> DNA

<213> Homo sapiens

<400> 59

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<210> 60
 <211> 704
 <212> DNA
 <213> Homo sapiens

<400> 60
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<210> 61
 <211> 142
 <212> DNA
 <213> Homo sapiens

<400> 61
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 cctaagggtt tccgcctcc gccaaatgca cgctacgcga acgcttgtag tgaattgctt 120
 accctggtgc gtcgcgtaaa tg 142

<210> 62
 <211> 641
 <212> DNA
 <213> Homo sapiens

<400> 62
 cgtatgtaga gccctcggaa ccctttatag cgactgacta tcgtccttc cttcttgca 60
 actaccgggc atggggaaca gacagtga ccaagacgtg gagggggggg aataaggggc 120
 gtagagcggg taggggttga agagttgcga cggaccagct aaaaggggca gcgccggaag 180
 gcgcagtaca aaatttaata agaaataggg acaaaacagg acaactaggg aacataaaca 240
 cgaaacgggg cgaagataat ggggggaqqt qccaaacqa gaaggtagac gaatggtgaa 300
 aggggaggtg cagaacaaat gccccggcg gaccggggca gcgggcaagt acaaagggcg 360

gtggtgggga aggcgaaaaa taaggcgggg ccatagtcag catagatagc gtagtaagcg 420
gagtaaaaga gatttagtat gaataattaa tagaaaaggc ctggacgcag taactagggtg 480
tatgaggcac aaaggcgggg cagcatgtaa gcctgaccag agaccgccg gggagatagc 540
ccacgatagg ctttgggggtg cactgaagga gagtagacat tgcggggggc cggcgggaga 600
aattgctaca gtatactgta gcaagcgatg agataccgga c 641

<210> 63

<211> 570

<212> DNA

<213> Homo sapiens

<400> 63

gagcggcgct agacgtcatc tgactgtctc agtcaggcta tccggaatcc tatcgccaat 60
agtgaatgct gccgtgaatg ttacggtgca aaggagagccg tgacggctgc cgattgcgaa 120
cggaacaaac cgccccggaa gggggtaacc ccgcctgcac gcactgcagg ctacagtaca 180
cgggacggcc ccgcggcgac caccatttgc ctactgcctt gaccccgcca aaatagggtgc 240
gttgccccgc cggcggacgc gccggggggc tagggctata ttttggggcg ccttgccctc 300
ccacctatgt cttacaggat ttgctgtaaa ccgccttcg cctcccaccg atgtgggcat 360
gccgcgatcg cgctgtccac gggttttcat atagtagggg gagggggggg gtaagcttcc 420
ctctccacct cctctttaca gcatttgcta gtatcccgcc cagcctgcc gcggacctca 480
cggtttcccg cctccgctaa ctgcacgctt cgcgatgtct tgtactgtat tgcttacct 540
tgtgcgctcg cggattgata tggggggggg 570

<210> 64

<211> 643

<212> DNA

<213> Homo sapiens

<400> 64

gagcggcgct agacgtcatc tgactgtctc agtcaggcta tccggaatcc tatcgccaat 60
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cggaacaaac cgccccggaa gggggtaacc ccgcctgcac gcactgcagg ctacagtaca 180
cgggacggcc ccgcggcgac caccatttgc ctactgcctt gaccccgcca aaatagggtgc 240
gttgccccgc cggcggacgc gccggggggc tagggctata ttttggggcg ccttgccctt 300
ccacctatgt cttacatgat ttgctgtaaa ccgccttcg ccttccaccg atgtggccgt 360
gccgcgatcg cgctgtccac gggttttcat atagtagggg gagggggggg gtaagcttcc 420
ctctccacct cctctttaca gcatttgcta gtatcccgcc cagcctgcc gcggacctca 480
cggtttcccg cctccgctaa ctgcacgcta cgcgaacgct tgtactgaat tgcttacct 540
cgtgcgctgg catgtggggc tggaggagat ccaagccatt gacattggtg ttgggaaccc 600
aaaggctggc tctcttctt tctggacgc tgggttgcct tag 643

<210> 65

<211> 804

<212> DNA

<213> Homo sapiens

```

<400> 65
gagcggcgct agacgtcatc tgactgtcta cagtcageta tccggaatcc tategccgct 60
accgactgtt gaacctatta caaacgggac gctgcctgta ttaaccgctg gggctttgta 120
cgtctattgt tggggcgcat gtaccggtac cgccgtttca taatacccta cccacacgtt 180
ggctgecgat accctttgca ttttgacacg cgctgctgcg cctccataat ggtgattact 240
tgcttttggt tgctagtgtt aaataactat ttaatgcttt ttgcttttat ttttgatatt 300
tgtttacagt tatgatttga cgcgtttacc acttacctat aaatcatgtt taaccgtggc 360
gtgggttggt atccggtgct gcgaggtgga ctgctggcct ttactacttt ggatattgat 420
acatggtgcc cctcacgcca tttgccggca ccttggggct agcgtgcat tttcaattac 480
gtgatgtgct gcttattggt gtggcctatt ggcgttagcc tatgaccgtc gcgaccccg 540
cctgtgcccg cggcccgagg tttagtgttt gcgttttgcc taccgtgact acgtacatta 600
tattttattg cttaaaccctt aacctaaaat agcttagaaa gttactgcct acgcttgat 660
ataaattaaa ttttgcrtgt gtattttggc cggcgttgg acaaaattgt ttgaggatta 720
aatacttcgt tttagcaatt tatactatgc ttggctaaca agatgctaaa tgcccttgac 780
caatgtgaag cggaggggcc agca 804

```

```

<210> 66
<211> 631
<212> DNA
<213> Homo sapiens

```

```

<400> 66
cacgtgtaga gggcgctag acgtcatctg actgtctcag tcaggctatc cggaatccta 60
tcgccaaaggc ccaagcgagg gatttaagaa atgacataac gtatagggga agatgggcag 120
taaaattaac aggacaccga aataataaga ctccgagact gggggtaatg caagagtcag 180
caggactagc tgccaggaaa agcagcgtga aaagaggtgg tacatgtaaa caaatcttgt 240
gacagcgcaa acaatgctag aaaattgcga gatattttgt ggggcccgcct gggcccagtt 300
gctaaaatgg acgctgaagt tagaagtaac ctgggcgacg acggcgata gaaggagcaa 360
tgaaacgagg gacaacgtga ggttggtgga gcgcgaagcc ggcaagcaaa aggcgggatg 420
gacctgagag cgtgaagttt atgaccgcaa acagaatagt agtaacggtc cgaacagcta 480
gaggggctga gcaagcgagc tacggagcaa gcgatgaggc tgggcggcct tgcggtgtga 540
tataagatgg cgggatggac ggagcaaaga tatgaaaaag ggctggtaaa gattaataaa 600
ggaattaatt aaataatagc actcgggtag t 631

```

```

<210> 67
<211> 604
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (490)
<223> a, c, g or t
<220>

```

<221> unsure
<222> (515)
<223> a, c, g or t

<220>
<221> unsure
<222> (524)
<223> a, c, g or t

<400> 67
cgacgaatcc acgtaagagc ggcgctagac gtcctctgac tgtctcagtc agctatccgg 60
aatcctatcg cgggggggag ggggaggggg tagaacaacg taaacaaaaa tgaaagcaaa 120
accggggcgt agaaactggg gcagtgcgca agataatgct ggaagtaatg tggtaagcga 180
accagttggc gcacqtcccg cgataacata accggcgatg aagaagcgcac ttggtggccg 240
cgtttgtaca cgaaatacca ggtagaacc cccggggggc ttaggacgtt aggagactgg 300
aaatacatta tcacataaaa atataggtgt gtgcatgacc cacgggtgaa atgcgtgtta 360
tgccctgctgt aagaccaaag aggaacacgc ggtagtttaa ttgatgggtg ggggccctgg 420
cccacccgct tttcctagta accaagggtg aaaaaagtag tgggaatctt tgcggggcca 480
cgggagaaan caagaggggt acagaaggct gacntaggc aganagaagc cagagacgat 540
acacagcaga caattgatgc gggagaaata agtagcacta aaggctattg cgcagggtgc 600
atga 604

<210> 68
<211> 579
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (507)
<223> a, c, g or t

<220>
<221> unsure
<222> (510)
<223> a, c, g or t

<400> 68
cacgtgtaga gcggcgctag acgtcatctg actgtctcag tcaggctatc cggaatccta 60
tcgctaccgt acttttgcac aaacgtacca agtttattat atactgccag ccaaaaaaac 120
cgacgagccg tgcgacgacc gaatattggt gttgaaaatt aacagtataa tatattgttt 180
aataagccct accgccgacc tgaaagatat agcgacgtac aatttgcccg cgacttgat 240
actatactta agtacaaccc ggccgcgcgc cggtttgtat gtataagatg ctaagcgcac 300
aatggtacga ttaattttgt tgataatgag atacaattat accgctaacg tccccccac 360
cccgacctgg cattgaccac acacaagccc gtttgccctg aacccccggc ccgcctcggc 420
cttacgcaa aattgataat gaatataaaa caaqaacccg cggccacgac tgacccctgg 480
atttgaatta cttaattgca cttttgntgn ttaatacgat aagccccaac cgacccatga 540

tacattaacc atgcggaaaa tatgtttagc agtattagt

579

<210> 69

<211> 621

<212> DNA

<213> Homo sapiens

<400> 69

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gcgctggcgc tgggtgggaa tggggctagc tgcggcctgg cgggaggcga tgcgctgcgg 120
tacggccgcg agcccgtgac gggggattaa tgggggggat ggacggattg cccctaccaa 180
aaaaaacggg gcgatggtgg ggagcgagcg tacttgcgta ggacgtcggc ggccggcgcg 240
cgacgaccac ttgcccagac ggccctgggc ccqcttaect atargtgcac cagtgggtgt 300
ccaccacctt tacgagtcgc ccggctgcaa cgaacagctt ggtctgccgc gtatatctac 360
acaccagata cgccctacctg ggctaaagcg tgacattaga cgatgtgggt tgcgccgacg 420
gcagcggtag ctgtctgatg gcggactacc acctggccat gttgaccgac cctcgcatgg 480
tcccccttat ggttatattg cgcttgaacc ccgttgtaat agaggcgcgg gtggcggtta 540
cttgttacgc cgggtgcgacg aaatgcttta attacgtgat ggccactacg tatatgtacg 600
tcgttgacgg aatgaccatg a                                     621
```

<210> 70

<211> 507

<212> DNA

<213> Homo sapiens

<400> 70

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gtgtagagcg gcgctagacg tcatctgact gtctcagtc ggcctatccg gaatcctatc 60
gctgctgac atcccgttgc gtatcatatg ccttgcaact gcttaatatg cttgggtctt 120
cgttggccgg ggtatgtagt tgacgcggaa ctgcacgaaa ctaaaactta ttagcctgat 180
gttacacttg agttgcaagg gtgcctacga ataccggcaa tacgccgggg ctgctaaagt 240
ggtgggagtt tgcgactaca ccttgtgacc tagggtttac gtttgatatg cggctgcgga 300
tattagcttt tgtgcggact acacattata cggcggggtt gacgtaaagg gtggcgcggt 360
taattggcag gcattggctg ggcttgacgt tgtgaccgac gagacctacg acggcgacga 420
cgtcgttgac accgtgcttg ccgtattgaa cgtatcggtc gtatacgacg acagcgacgt 480
gtacgacgaa tatgttgcat acgacgc                                     507
```

<210> 71

<211> 683

<212> DNA

<213> Homo sapiens

<400> 71

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agagccctcg gaacccttta tagcgactga ctatcgctcc tccttcttgc aaactaccgg 60
gccaaactgc ggcttagacg ctgggagcgc gggcgataag tatactaacc actagtgcga 120
caacgcggtt cctactgccg cgggctactg cgtgttgatc gcctttactg cggccttccc 180
```

```

gatgggcata cccaatatgt cccgcgtggc gaccgcgtcc ttctccttgt cactagtctt 240
actggtctata attctgccgg tgtctgtctac taccgctacg ttgttggcgc cgatcgccgc 300
tgcgttact gtgcctatta caatcgctac gctggcgctc attactcttg tgctcccgct 360
tacgttgcgc gtggttacat tccgtaaatg ctgcgagact gccgtagtcc aaaggaagat 420
cgctccgtac tgccatata cgaggacggc ttatcgcggc gtcccgcatc tcctggtagt 480
gcccgtctata attaccggga tacttccgct actgctctcc actatacaac ttcggacccc 540
tttaactgcg gccctaaatt gctgtgtacc tccctcaagt agcaccgatt cgctatccag 600
ttggctaacc tcaggatgac catgagctac aaattacaca cggaacaag attctatgtg 660
gaattgtgtg gtgagtcgct gcc 683

```

<210> 72

<211> 824

<212> DNA

<213> Homo sapiens

<400> 72

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gagccctcgg aaccctttat agcgactgac taccgctcct ccttcttgca cactaccggg 60
ccaagctgcg gcttagacgc tgggagcgcg ggcgataagt atactaacca ctagtgtctac 120
aacgccgttc ctactgccgc gggctactgc gtgttgatcg cctttactgc ggcttcccg 180
atgggcatac ccaatatgtc ccgcgtggcg accgcgtcct tctccttgtc actagtctta 240
ctggctataa ttctgccggt gtctgtctact accgctacgt tgttggcgcc gatcgccgct 300
gcgcttactg tcgtcattac aatcgctacg ctggcgctca ttactcttgt gctcccgctt 360
acgttgccgc tggttacatt ccgtaaatgc tgcgagactg ccgtagtcca aaggaagatc 420
gtccgctact gtccatatac gaggacggct tatcgcgcg tcccgcatct cctggtagtg 480
cccgtctataa ttaccgggat acttccgcta ctgctctcca ctatacaact tcggaccct 540
ttaactgggg gcttaaatg ctgtgtacct ccttcaagta gcaccgatc gctatccagt 600
tggctaacct caggatgacc atgagctaca aattacacac gggaacaaga ttctatgtgg 660
aattgtgtgg tgagtcgtg ataattgtgg ctgctgtggt cggcactgcg cacggccgcc 720
gggggatttc tagaggggtt gatgcgatga tgacggaggt atttatgtag atgccgctgg 780
tgctaacccc cgggagtttt tgacgatagg atgttatttg acgc 824

```

<210> 73

<211> 970

<212> DNA

<213> Homo sapiens

<400> 73

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atgtagagcc ctcggaaccc tttatagcga ctgactatcg ctctccttc ttgcacacta 60
ccgggtctct gcatccccct atctgtcggg cttcttcacc tctggacggc cacggccttc 120
ctctctatct tccttcgcca cccgatttcg ccttaaattg cattcttcgc cctctgttgt 180
tcctttcata tctttctctt ctccccgcc accgctgtcg ctctgtcaca agcgtttcg 240
ggcgaccacg gtagacttac cctgccctcg gcttgccgcg ggtataccac cgcattcag 300
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ttgatagcag ctacaaatct attcggcaaa ttatgcca gctacctcta tatctgcgtt 420
tcgtctgttt ttctgtctg caaaagattc caqqctcgg aggaagcgc ataaccctt 480
cgggtcgata tggttagaat atgggtaaag ggaccaggc ggctttccta tctacctcac 540

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cgttccctc accggactcg cacttagcac ccttgtaaaa ccaggctgct cacatttact 600
 cccgaaatgg gtgtacggc ggcactaccc gcggtgatgg cctatccgtt gggggggaag 660
 acctttgacg ggcgcgcgc gggcacgggt ccgctcatgc tttatattac gcagtttgtc 720
 attagcccg cgcggcgat cttgctgact acttccgctg ctatagtaat tactgcgctt 780
 ttttcgcgc ccgctttcgg agttgttttc gtcttatgct ttggcggatg aaattacaaa 840
 tgggagcgcg gtacactcga cgacgcgggc gcaatgagtg aaaattgcag acacgccccg 900
 ttatatgggt acggtttatc acaatgctac atgcggaggt gcttggaggg gtagtgccgg 960
 tggggttata 970

<210> 74
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 74
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 gggcttccct gaccacctca cacttacagg atgtgcttgt atccgccta cgctgacgc 120
 ggatgtaacg gtttcccgcc accgccaact gcacgcttcg cgatgtctac tgtgccggaa 180
 attggggagt cagtaactgg gcaggagtgc gggtcacgta aaatcctgct agtttgcgga 240
 cgacttagaa aatgcacaac gacagaatgc ctgcccgggg ccaaagtaac caccgggtat 300
 tacaagcgga aatgaatccc caccgggcgg ataatatgc tatatacagg cacgccgata 360
 ggcggagggg cctatgctta gcatgaaaaa aatacacttt agtacagacg caaccctgcg 420
 gaacgcactt gttaggctac cctaatacac acttggggac taccaccac gggaagcacg 480
 ggaataaata gaatgaatta aactttaata tttggcgggg tttgaccccg ggtgggaagt 540
 gccccgacgg aattaaagcg gtaaatttag taagcgaca aacgcgaatg caaatggggc 600
 ctgtattgat acacacaca 619

<210> 75
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 75
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 ggccattttt gttatctttt atttaatggc tgccactgtt tttttcatct cggtcatttt 120
 ctatatcttc aaaagggaga tggaaaaaaa actttgactt caacaagcgc cgaatctggg 180
 cgctggattc tagcaatgct actgaggagc ctttggcagg tggcgcagag aaagtcagct 240
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 gtggctcctc cttctaaga gcaaggagct ctctgaggtg gaggaggctt gtgaagactt 360
 cccagaacac tgcacccacc tgaccaagag gtacttttta aggtcattca aactgtcatc 420
 tacacatgaa taacaatgaa attctcataa agaagcagaa ataccagga ggcatgaaga 480
 gtcacatgc ttcaaaagta catg 504

<210> 76
 <211> 1502

<212> DNA

<213> Homo sapiens

<400> 76

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ggggactttt gaaatgcatt ctgtgaatga gaagaaatgc aaacatgttg gcaaaactga 60
ttattttcat tgtggatctc acgcttgctt tggccatttt tggtatcttt tatttaattg 120
ctgccactgt ttttttcac tgggtcattt tctatatttt caaaagggag atggaaaaaa 180
aactttgact tcaacaagcg ccgaatctgg gcgctggatt ctacgaatgc tactgaggag 240
cctttggcag gtggcgacga gaaagtcagc tccaagctgc ttctgtcca ttgtccagct 300
gtaggagaag ggtctttcct gcccaaggac agtggctctc tcttctaaag agcaaggagc 360
tctctgaggt ggaggaggct tgtgaagact tcccagaaca ctgcaccac ctgaccaaga 420
ggtacttttt aaggctcatt aaactgtcat ctacacatga ataacaatga aattctcata 480
aagaagcaga aataccagg aggcataag agtcacatg cttcaaaagt acatgtatta 540
ggacttccac qacctcaqqa aaagtagact ccgtaactct taaaagctca atcttggaga 600
ggagaaacat gctgtttgat gacatagcac agaaacttgt tgaaatatcc ttggagcttg 660
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aattgtcttt gctagtctca gcacagccca agaggagcat cttcatgag ccaactgaaa 840
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attaggactt catgtattat gtattatgtc aacactttat tcattatgct gatcatactc 960
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atattaataa gcattttttc tgaatcaata accaaccccc aaaaaatctg cagccatggg 1140
tgtaaatacc atacattcca aagaaaagtg gaaatgaatg aaggaccaat tttgaggaag 1200
aattaggggt ctcaaaaatt caacaattac aatcagtaag ttttttaaaa ttaacaaat 1260
tcaacaagta tgtcaacaag tattcaacaa gttagagtta taaacatttg ttcaaaattt 1320
tacacgtggg taataccttc agagcagtta gcagcaagat tctcattttt aaatctttac 1380
ccctttgttc attttaaggc aagatggaga ccatgttgat gtcagagcaa ttgggtccagg 1440
gttggtgtgag gagccactag gaaggagaga acagggaat gtggacccaa acagcatagt 1500
gt 1502
```

<210> 77

<211> 516

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (17)

<223> a, c, g or t

<400> 77

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acttcacgac ctgaggaaa tagactccgt aactcttaaa agctcaatct tggagaggag 120
aaacatgetg tttgatgaca tagcacagaa acttggtgaa atatccttgg agcttgagat 180
gtcgagagcg agccatcaga atgttctcaa qaattaaatt qaaaaatggt gcttcaaaat 240
gtcttagcca accaaataca aacgtttttg tcattgtgac aaaaaaaaag ctacaccaatt 300
```


gtctttgcta gtctcagcac agcccaagag gagcatcctt catgagccaa ctgaaaaaca 360
 gtgtgtagtc tatgcttctg accagatggg cttctcttgt caccataaca ttatgtatta 420
 ggacttcacg tattatgtat tatgtcaaca ctttattcat tatgctgac atactctgta 480
 tttcacttgc tctggttatt tgtaaagctt ttctta 516

<210> 78

<211> 1500

<212> DNA

<213> Homo sapiens

<400> 78

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 ctgccactgt ttttttcacg tcggtcattt tctatatattt caaaagggag atggaaaaaa 180
 aactttgact tcaacaagcg ccgaatctgg gcgctggatt ctagcaatgc tactgaggag 240
 cctttggcag gtggcgagag gaaagtcagc tccaagctgc ttctgtcca ttgtccagct 300
 gtaggagaag ggtctttcct gcccaaggac agtggctctc tcttctaaag agcaaggagc 360
 tctctgaggt ggaggaggct tgtgaagact tcccagaaca ctgcacccac ctgaccaaga 420
 ggtacttttt aagggtcattc aaactgtcat ctacacatga ataacaatga aattctcata 480
 aagaagcaga aataccagg aggcatgaag agtcatcatg cttcaaaagt acatgtatta 540
 ggacttcacg acctcaggaa agtagactcc gtaactctta aaagctcaat cttggagagg 600
 agaaacatgc tgtttgatga catagcacag aaacttggtg aaatatcctt ggagcttgag 660
 atgtcgagag cgagccatca gaatgttctc aagaattaaa ttgaaaaatg ttgcttcaaa 720
 atgtcttagc caaccaaata caaacgtttt tgtcattgtg acaaaaaaaaa agctcaccaa 780
 ttgtctttgc tagtctcagc acagcccaag aggagcatcc ttcattgagcc aactgaaaaa 840
 cagtgtgtag tctatgcttc tgaccagatg ggcttctctt gtcaccataa cattatgtat 900
 taggacttca tgtattatgt attatgtcaa cactttattc attatgctga tcatactctg 960
 tatttcactt gctctgggta tttgtaaagc ttttctatt tcatcattaa attatccttg 1020
 tatttttagc actgcatattt agtactctta tattctttat agtgcctgcc caaatgacat 1080
 attaataagc attttttctg aatcaataac caaccccaa aaaatctgca gccatgggtg 1140
 taaataccat acattccaaa gaaaagtgga aatgaatgaa ggaccaattt tgagggaagaa 1200
 ttagggttct caaaaattca acaattacaa tcagtaagtt ttttaaaatt taacaaattc 1260
 aacaagtatg tcaacaagta ttcaacaagt tagagttata aacatttggt caaaatttta 1320
 cactgtgtta ataccttcag agcagttagc agcaagattc tcatttttaa atctttaccc 1380
 ctttgttcat tttaaggcaa gatggagacc atgttgatgt cagagcaatt ggtccagggt 1440
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<210> 79

<211> 720

<212> DNA

<213> Homo sapiens

<400> 79

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 ctttggtttt attcttgccc tggtcattgt agccttactt tqqaqaaat catgttccct 120
 tttgtatgta ggtctaaaaa tagtccacag gtctattgct aagagttttt ttccaaagct 180

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ggcattatag tgttttcatg gtttttggtc tatctattca gtttagcaaa cactttacct 240
gaaaagcaga gcttctaggg tgggggggtg ggggaggcac tggcagtga gcgagtaccc 300
ccttactgta aatgaggaat cacagaggat agatacatca gatacgtcaa gttctacaat 360
ttaaacataa cgttcataat taccacttgg ggaatacttt tcctagatgc ttaatagcag 420
cattctaccc cacttttttc tcagtctgag gggttgagaa ggtgggaaag ttggccctac 480
gtaagcaagg gtgaccttct gggtagcctt tcagaccaca ccagggtgatg gttccccaaa 540
tactactgag ccccttctga gttccagaag ctagggttcc aagaggagaa taagaaccag 600
tttctaaact caggctcttg ataggaggaa gtacacagtc ttcagaaata gaagacctga 660
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<210> 80
<211> 1040
<212> DNA
<213> Homo sapiens

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<400> 80
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c t t g g c c c t t t g a g c a t t g g t a c t t g g g a c a a t t c c a t t g c t t g g a g a g c t g t a a a 120
g g c t g g a g g g a g t t t c t t g a a g c c t c t t t a a t a c a g g c t g t g a c a c c a c c a g c c c t g g a 180
g g g c t g g g a a t a g a t t c c t a a a g g a t g a c a a c a a g t g t g t c t t a t t g c c a a t c c c a 240
a t g t t c a t a a t c t t g c a t c c a a t g t t c t t c c t a g t a a t t c a t c c t g a c t c t a c c c t 300
t t t t a a a a a a a t t a a t t t c t g a a t c t t a a a g t c a g a c t c t a c c t c t t t a a g a t g a a a a 360
t t t a g a t c a t t t t t a t c c t t t g g t t t t a t t c t t g c c c t g g t c a t g t t g a g c t t t a c t t 420
t g g c a g a a a t c a t g t t c c c t t t g t a t g t a g g t c a a a a a t a g t c c a c a g g t c t a t t g c t 480
a a g a g t t t t t t t t c a a a g c t g g c a t t a t a g t g t t t t c a t g t t t t t g t c t a t c a t t c a 540
g t t t a g c a a a c a c t t t a c c t g a a a a g c a g a g c t t c t a g g g t g g g g g g t t g g g g a g g c a c 600
t g g c a g t g a a g c g a g t a c c c c t t a c t g t a a a t g a g g a a t c a c a g a g g a t a g a t a c a t c a 660
g a t a c g t c a a g t t c t a c a a t t t a a c a t a a c g t t c a t a a t t a c c a c t t g g g a a t a c t t t 720
t c c t a g a t g c t t a a t a g c a g c a t t c t a c c c a c t t t t t t c t a g t c t g a g g g t t g a g a a 780
g g t g g g a a a g t t g g c c c t a c g t a a g c a a g g g t g a c c t t c t g g g t g a g c t t t c a g a c c a c a 840
c c a g g t g a t g g t c c c c a a a t a c t a c t g a c c c t t c t g a g t t c c a g a a g c t a g g g t t c c 900
a a g a g g a g a a t a a g a a c c a g t t t c t a a a c t c a g g c t c t t g a t a g g a g g a a g t a c a c a g t c 960
t t c a g a a a t a g a a g a c c t g a t t t t a a a a c t t g t c c t a a c t t t t a a t a g c a c g t t a a a a g t 1020
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<210> 81
<211> 259
<212> DNA
<213> Homo sapiens

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<400> 81
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cgtgccgggg accctgtacc gtgctgggaa tgcggtaggc agatctcaag ttgtcaggga 180
gaaaagagcc atgatccaaa agcaaaaggc ccaccaatgg atgagtgtta aaccqaatgt 240
gttctatcca tacagtgga 259

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<210> 82
<211> 34
<212> PRT
<213> Homo sapiens

<400> 82
Met Lys Tyr Tyr Met Glu Asn Ile Ser Ile Glu Ile Pro Ile Leu Lys
1 5 10 15

Cys Ile Val Phe Ser Leu Ile Val Gln Tyr Val His Cys Asn Phe Leu
20 25 30

Leu Val

<210> 83
<211> 38
<212> PRT
<213> Homo sapiens

<400> 83
Met Tyr Lys Lys Glu Asn Glu Gln Ile Asn Arg Lys Lys Asp Leu Trp
1 5 10 15

Phe Asn His Ile Glu Leu Leu His Val Cys Tyr Phe Thr Val Lys Asp
20 25 30

Thr Ser Leu Ile Leu Asn
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<210> 84
<211> 68
<212> PRT
<213> Homo sapiens

<220>
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<222> (35)

<220>
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<220>

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<222> (67)

<400> 84

Met Met Met Ala Leu Gly Arg Phe Val Glu Asn Ser Phe His Ala Leu
1 5 10 15

Glu Gln Gly Leu Gly Asn Phe Phe Cys Lys Glu Pro Asn Ile Asn Ile
20 25 30

Leu Asp Xaa Val Gly Gln Val Val Ser Val Ile Ala Thr Gln Ile Cys
35 40 45

Cys Cys Ser Val Asn Gln Pro Glu Leu Ile Phe Xaa Gln Met Ser Xaa
50 55 60

Ala Val Xaa Arg
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<210> 85

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (41)

<220>

<221> UNSURE

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<220>

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<222> (49)

<400> 85

Met Leu Phe Phe Asp Ile Glu Ile Glu Gln Asp Asp Thr Pro Pro Pro
1 5 10 15

Phe Tyr Phe Ser Ser Tyr Thr Val Lys Lys Ser Tyr Phe His Gly Leu
20 25 30

Leu Ser Val Thr Phe Trp Val Phe Xaa Leu Phe Leu Leu Xaa Leu
35 40 45

Xaa Leu Phe Leu Cys Phe Leu Thr Val Tyr Tyr Glu Phe Ala Val
50 55 60

<210> 86

<211> 20

<212> PRT

<213> Homo sapiens

<400> 86

Met Cys Arg Ser Tyr Gly Phe Ser Phe Ile Arg Val Leu Leu Gly Gly
1 5 10 15

Trp Gln Val Ser
20

<210> 87

<211> 569

<212> PRT

<213> Homo sapiens

<400> 87

Met Leu Lys Glu Trp Ala Ile Lys Gln Gly Ile Leu Leu Lys Val Ala
1 5 10 15

Glu Thr Ile Lys Ser Trp Ile Phe Phe Ser Gln Cys Asn Lys Lys Asp
20 25 30

Asp Leu Leu His Lys Leu Asp Ile Gly Phe Arg Leu Asp Ser Leu His
35 40 45

Thr Ile Leu Gln Gln Glu Val Leu Leu Gln Glu Asp Val Glu Leu Ile
50 55 60

Glu Leu Leu Asp Pro Ser Ile Leu Ser Ala Gly Gln Ser Gln Gln Gln
65 70 75 80

Glu Asn Gly His Leu Pro Thr Leu Cys Ser Leu Ala Thr Pro Asn Ile
85 90 95

Trp Asp Leu Ser Met Leu Phe Ala Phe Ile Ser Leu Leu Val Met Leu
100 105 110

Pro Thr Trp Trp Ile Val Ser Ser Trp Leu Val Trp Gly Val Ile Leu

115	120	125
Phe Val Tyr Leu Val Ile Arg Ala Leu Arg Leu Trp Arg Thr Ala Lys		
130	135	140
Leu Gln Val Thr Leu Lys Lys Tyr Ser Val His Leu Glu Asp Met Ala		
145	150	155 160
Thr Asn Ser Arg Ala Phe Thr Asn Leu Val Arg Lys Ala Leu Arg Leu		
165	170	175
Ile Gln Glu Thr Glu Val Ile Ser Arg Gly Phe Thr Leu Val Ile Ala		
180	185	190
Ala Cys Pro Phe Asn Lys Ala Gly Gln His Pro Ser Gln His Leu Ile		
195	200	205
Gly Leu Arg Lys Ala Val Tyr Arg Thr Leu Arg Ala Asn Phe Gln Ala		
210	215	220
Ala Arg Leu Ala Thr Leu Tyr Met Leu Lys Asn Tyr Pro Leu Asn Ser		
225	230	235 240
Glu Ser Asp Asn Val Thr Asn Tyr Ile Cys Val Val Pro Phe Lys Glu		
245	250	255
Leu Gly Leu Gly Leu Ser Glu Glu Gln Ile Ser Glu Glu Glu Ala His		
260	265	270
Asn Phe Thr Asp Gly Phe Ser Leu Pro Ala Leu Lys Val Leu Phe Gln		
275	280	285
Leu Trp Val Ala Gln Ser Ser Glu Phe Phe Arg Arg Leu Ala Leu Leu		
290	295	300
Leu Ser Thr Ala Asn Ser Pro Pro Gly Pro Leu Leu Thr Pro Ala Leu		
305	310	315 320
Leu Pro His Arg Ile Leu Ser Asp Val Thr Gln Gly Leu Pro His Ala		
325	330	335
His Ser Ala Cys Leu Glu Glu Leu Lys Arg Ser Tyr Glu Phe Tyr Arg		
340	345	350
Tyr Phe Glu Thr Gln His Gln Ser Val Pro Gln Cys Leu Ser Lys Thr		
355	360	365
Gln Gln Lys Ser Arg Glu Leu Asn Asn Val His Thr Ala Val Arg Ser		

370

375

380

Leu Gln Leu His Leu Lys Ala Leu Leu Asn Glu Val Ile Ile Leu Glu
 385 390 395 400

Asp Glu Leu Glu Lys Leu Val Cys Thr Lys Glu Thr Gln Glu Leu Val
 405 410 415

Ser Glu Ala Tyr Pro Ile Leu Glu Gln Lys Leu Lys Leu Ile Gln Pro
 420 425 430

His Val Gln Ala Ser Asn Asn Cys Trp Glu Glu Ala Ile Ser Gln Val
 435 440 445

Asp Lys Leu Leu Arg Arg Asn Thr Asp Lys Lys Gly Lys Pro Glu Ile
 450 455 460

Ala Cys Glu Asn Pro His Cys Thr Val Val Pro Leu Lys Gln Pro Thr
 465 470 475 480

Leu His Ile Ala Asp Lys Asp Pro Ile Pro Glu Glu Gln Glu Leu Glu
 485 490 495

Ala Tyr Val Asp Asp Ile Asp Ile Asp Ser Asp Phe Arg Lys Asp Asp
 500 505 510

Phe Tyr Tyr Leu Ser Gln Glu Asp Lys Glu Arg Gln Lys Arg Glu His
 515 520 525

Glu Glu Ser Lys Arg Val Leu Gln Glu Leu Lys Ser Val Leu Gly Phe
 530 535 540

Lys Ala Ser Glu Ala Glu Arg Gln Lys Trp Lys Gln Leu Leu Phe Ser
 545 550 555 560

Asp His Gly Val Lys Ser Ala Trp Asn
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<210> 88

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (7)..(24)

<400> 88

Met Ser Leu Ser Leu Pro Phe Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Ser Thr Lys Ser Phe Gln Ile
20 25 30

Leu His Thr Gln Phe Phe Leu Val Phe Met Ser Asp Ser Ile Val His
35 40 45

Leu Ser Gln
50

<210> 89

<211> 105

<212> PRT

<213> Homo sapiens

<400> 89

Met Ser Ser Asp Leu Pro Pro Lys Lys Ser Lys Asp Lys Leu Asp Lys
1 5 10 15

Lys Lys Glu Val Val Lys Pro Pro Tyr Pro Lys Ile Arg Arg Ala Ser
20 25 30

Gly Arg Leu Ala Gly Arg Lys Val Phe Val Glu Ile Pro Lys Lys Lys
35 40 45

Tyr Thr Arg Arg Leu Arg Glu Gln Gln Lys Thr Ala Glu Gly Asp Val
50 55 60

Gly Asp Tyr Arg Cys Pro Gln Asp Gln Ser Pro Asp Arg Val Gly Thr
65 70 75 80

Glu Met Glu Pro Val Ser Lys Asn Glu Gly Cys Gln Ala Gly Ala Glu
85 90 95

Leu Glu Asp Leu Ser Lys Lys Ala Gly
100 105

<210> 90

<211> 711

<212> PRT

<213> Homo sapiens

<400> 90

Met	Glu	Ser	Gly	Ala	Val	Leu	Leu	Glu	Ser	Lys	Ser	Ser	Pro	Phe	Asn
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Leu	Leu	His	Glu	Met	His	Glu	Leu	Arg	Leu	Leu	Gly	His	Leu	Cys	Asp
			20					25						30	
Val	Thr	Val	Ser	Val	Glu	Tyr	Gln	Gly	Val	Arg	Lys	Asp	Phe	Met	Ala
			35					40					45		
His	Lys	Ala	Val	Leu	Ala	Ala	Thr	Ser	Lys	Phe	Phe	Lys	Glu	Val	Phe
	50						55					60			
Leu	Asn	Glu	Lys	Ser	Val	Asp	Gly	Thr	Arg	Thr	Asn	Val	Tyr	Leu	Asn
65					70					75					80
Glu	Val	Gln	Val	Ala	Asp	Phe	Ala	Ser	Phe	Leu	Glu	Phe	Val	Tyr	Thr
					85					90				95	
Ala	Lys	Val	Gln	Val	Glu	Glu	Asp	Arg	Val	Gln	Arg	Met	Leu	Glu	Val
					100				105				110		
Ala	Glu	Lys	Leu	Lys	Cys	Leu	Asp	Leu	Ser	Glu	Thr	Cys	Phe	Gln	Leu
			115				120					125			
Lys	Lys	Gln	Met	Leu	Glu	Ser	Val	Leu	Leu	Glu	Leu	Gln	Asn	Phe	Ser
			130				135					140			
Glu	Ser	Gln	Glu	Val	Glu	Val	Ser	Ser	Gly	Ser	Gln	Val	Ser	Ala	Ala
145					150					155					160
Pro	Ala	Pro	Arg	Ala	Ser	Val	Ala	Thr	Asp	Gly	Pro	His	Pro	Ser	Gly
					165					170				175	
Leu	Thr	Asp	Ser	Leu	Asp	Tyr	Pro	Gly	Glu	Arg	Ala	Ser	Asn	Gly	Met
			180						185					190	
Ser	Ser	Asp	Leu	Pro	Pro	Lys	Lys	Ser	Lys	Asp	Lys	Leu	Asp	Lys	Lys
			195				200					205			
Lys	Glu	Val	Val	Lys	Pro	Pro	Tyr	Pro	Lys	Ile	Arg	Arg	Ala	Ser	Gly
			210				215				220				
Arg	Leu	Ala	Gly	Arg	Lys	Val	Leu	Val	Glu	Ile	Pro	Lys	Lys	Lys	Tyr
225					230					235					240
Thr	Arg	Arg	Leu	Arg	Glu	Gln	Gln	Lys	Thr	Ala	Glu	Gly	Asp	Val	Gly
					245					250					255

Asp Tyr Arg Cys Pro Gln Asp Gln Ser Pro Asp Arg Val Gly Thr Glu
 260 265 270
 Met Glu Gln Val Ser Lys Asn Glu Gly Cys Gln Ala Gly Ala Glu Leu
 275 280 285
 Glu Glu Leu Ser Lys Lys Ala Gly Pro Glu Glu Glu Glu Glu Glu
 290 295 300
 Glu Glu Asp Glu Glu Gly Glu Lys Lys Lys Ser Asn Phe Lys Cys Ser
 305 310 315 320
 Ile Cys Glu Lys Ala Phe Leu Tyr Glu Lys Ser Phe Leu Lys His Ser
 325 330 335
 Lys His Arg His Gly Val Ala Thr Glu Val Val Tyr Arg Cys Asp Thr
 340 345 350
 Cys Gly Gln Thr Phe Ala Asn Arg Cys Asn Leu Lys Ser His Gln Arg
 355 360 365
 His Val His Ser Ser Glu Arg His Phe Pro Cys Glu Leu Cys Gly Lys
 370 375 380
 Lys Phe Lys Arg Lys Lys Asp Val Lys Arg His Val Leu Gln Val His
 385 390 395 400
 Glu Gly Gly Gly Glu Arg His Arg Cys Gly Gln Cys Gly Lys Gly Leu
 405 410 415
 Ser Ser Lys Thr Ala Leu Arg Leu His Glu Arg Thr His Thr Gly Asp
 420 425 430
 Arg Pro Tyr Gly Cys Thr Glu Cys Gly Ala Arg Phe Ser Gln Pro Ser
 435 440 445
 Ala Leu Lys Thr His Met Arg Ile His Thr Gly Glu Lys Pro Phe Val
 450 455 460
 Cys Asp Glu Cys Gly Ala Arg Phe Thr Gln Asn His Met Leu Ile Tyr
 465 470 475 480
 His Lys Arg Cys His Thr Gly Glu Arg Pro Phe Met Cys Glu Thr Cys
 485 490 495
 Gly Lys Ser Phe Ala Ser Lys Glu Tyr Leu Lys His His Asn Arg Ile
 500 505 510

His Thr Gly Ser Lys Pro Phe Lys Cys Glu Val Cys Phe Arg Thr Phe
515 520 525

Ala Gln Arg Asn Ser Leu Tyr Gln His Ile Lys Val His Thr Gly Glu
530 535 540

Arg Pro Tyr Cys Cys Asp Gln Cys Gly Lys Gln Phe Thr Gln Leu Asn
545 550 555 560

Ala Leu Gln Arg His Arg Arg Ile His Thr Gly Glu Arg Pro Phe Met
565 570 575

Cys Asn Ala Cys Gly Arg Thr Phe Thr Asp Lys Ser Thr Leu Arg Arg
580 585 590

His Thr Ser Ile His Asp Lys Asn Thr Pro Trp Lys Ser Phe Leu Val
595 600 605

Ile Val Asp Gly Ser Pro Lys Asn Asp Asp Gly His Lys Thr Glu Gln
610 615 620

Pro Asp Glu Glu Tyr Val Ser Ser Lys Leu Ser Asp Lys Leu Leu Ser
625 630 635 640

Phe Ala Glu Asn Gly His Phe His Asn Leu Ala Ala Val Gln Asp Thr
645 650 655

Val Pro Thr Met Gln Glu Asn Ser Ser Ala Asp Thr Ala Cys Lys Ala
660 665 670

Asp Asp Ser Val Val Ser Gln Asp Thr Leu Leu Ala Thr Thr Ile Ser
675 680 685

Glu Leu Ser Glu Leu Thr Pro Gln Thr Asp Ser Met Pro Thr Gln Leu
690 695 700

His Ser Leu Ser Asn Met Glu
705 710

<210> 91

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (27)

<400> 91

Met Phe Arg Lys Gly Met Leu Pro Leu Asp Met Glu Ala Ser Leu Asn
1 5 10 15

Cys Tyr Ile Ser Leu Arg Lys Leu Met Arg Xaa Met Pro Glu Lys Glu
20 25 30

Asp Ser Asn Lys Glu Asp Lys Arg Lys Thr Asp Lys Ser Ile Glu Phe
35 40 45

Leu

<210> 92

<211> 18

<212> PRT

<213> Homo sapiens

<400> 92

Met Ala Glu Asp Lys Leu Pro Ser Arg Val Gly Asn Leu Asn Pro Lys
1 5 10 15

Ser Leu

<210> 93

<211> 36

<212> PRT

<213> Homo sapiens

<400> 93

Met Leu Trp Phe Gln Pro Gln His Pro Ala Lys Val Ser Trp Val Ile
1 5 10 15

Gly Thr Leu Leu Thr Cys Thr Gly Cys Lys Pro Leu Ile Thr Ser Ser
20 25 30

Asp Gly Gln Thr
35

<210> 94

<211> 77

<212> PRT

<213> Homo sapiens

<400> 94

Met Phe Cys Lys Trp Ser Ala Gln Leu Ala Arg Phe Pro Ser Ala Cys
1 5 10 15

Gly Gln Arg Val Val His Arg Pro Asp Arg Ser Phe Leu Ala Thr Leu
20 25 30

Glu Leu Cys Leu Pro Pro Gln Leu Pro Ser Phe Cys Tyr Cys Ile Ile
35 40 45

Asn Ile Ser Pro Leu Glu Lys Met Tyr Val Gln Phe Leu Gln Arg Leu
50 55 60

His Arg Gly Gly Pro Thr Leu Asn Glu Leu Thr Leu Thr
65 70 75

<210> 95

<211> 20

<212> PRT

<213> Homo sapiens

<400> 95

Met Ser Ser Ile Tyr Pro Met Pro Leu Glu Pro Phe Leu Val Ile Val
1 5 10 15

Ser Leu Cys Tyr
20

<210> 96

<211> 52

<212> PRT

<213> Homo sapiens

<400> 96

Met Arg Ile Thr Phe Phe Thr Arg Leu Thr Leu Lys Gly Lys Thr His
1 5 10 15

Lys Cys His Thr Thr Ile Asn Val Thr Leu Tyr Ser Cys Asn Trp Ile
20 25 30

Ser Asp Tyr Ser His Lys Pro Leu Ser Leu Leu Leu Gln Leu Met Gly
35 40 45

Gly His Phe Asp
50

<210> 97
<211> 38
<212> PRT
<213> Homo sapiens

<400> 97
Met Thr Val Ser Pro Val Phe Leu Met Ala Asn Asn Asn Asn Lys Ser
1 5 10 15

Asn Leu Phe Thr Tyr Gln Phe Glu Pro Pro Asp Leu Leu Leu Val Leu
20 25 30

His Pro Ser Ile Lys Lys
35

<210> 98
<211> 54
<212> PRT
<213> Homo sapiens

<400> 98
Phe Leu Leu Leu Phe Phe Ile Cys Leu Phe Phe Tyr Glu Thr Glu Ser
1 5 10 15

Cys Ser Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Gly Ser Leu
20 25 30

Gln Pro Leu Pro Pro Trp Phe Lys Ala Phe Ser Cys Leu Ser Leu Pro
35 40 45

Ser Ser Trp Asp Tyr Arg
50

<210> 99
<211> 51
<212> PRT
<213> Homo sapiens

<400> 99
Met Phe Leu Asp Ile Phe Asn Ser Phe Arg Cys Ile Ala Leu Ser Ala
1 5 10 15

Ser Gly Leu Leu His Lys Ser Ile Ser Ser Glu Leu Thr Leu Trp Ile
20 25 30

Pro Phe Ser Lys Leu Glu Gly Val Ile Lys Phe Leu Ile Ile Arg Val
35 40 45

Leu Val Ile
50

<210> 100
<211> 25
<212> PRT
<213> Homo sapiens

<400> 100
Met Val Ser Lys Asp Pro Ser His Val Gln Asp Val Ser Ser Ser Ala
1 5 10 15

Leu His Leu His Ile His Cys His Ser
20 25

<210> 101
<211> 76
<212> PRT
<213> Homo sapiens

<400> 101
Met Val Phe Gln Tyr Met Gln Pro Ser Ser Ser Lys Leu Arg Thr Phe
1 5 10 15

Leu Ser Pro Pro Thr Arg Ser Pro Met His Met Gly Pro Ser Leu Pro
20 25 30

Arg Pro Pro Asn Pro Ser Pro Ala Leu Ile Val Gly His Trp Pro Val
35 40 45

Leu Gly His Ser Asn Arg Ser Arg Ala Thr Leu Thr Val Cys Val Phe
50 55 60

Gly Pro Arg Val Ala Val Cys Met Arg Ser His Ala
65 70 75

<210> 102
<211> 43
<212> PRT
<213> Homo sapiens

<400> 102

Met Ser Lys Val Val Val Leu Asn Phe Asp Lys Asn Gly Ser Leu Thr
1 5 10 15

Thr Tyr Leu Ser Lys Lys Met Ala Pro Lys Trp Lys Leu His Ile Ser
20 25 30

Trp Ala Pro Glu Ser Arg Met Leu Cys Ser Trp
35 40

<210> 103

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (27)..(50)

<400> 103

Met Tyr Ser Ser Leu Phe Val Lys Leu Leu His Val Tyr Ile Ile Phe
1 5 10 15

Leu Thr Glu Gly Phe Phe Arg Tyr Tyr Phe Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Xaa Xaa Asp Phe Leu
50

<210> 104

<211> 49

<212> PRT

<213> Homo sapiens

<400> 104

Met Lys Ser His His His Pro Phe Pro Leu Asp Ser Pro Val Pro Pro
1 5 10 15

Leu Leu Tyr Leu Ile Leu Ser Ser Pro Gln Ser Arg Asn Ile Ile Arg
20 25 30

Leu Ala Asn Thr Arg Gln Lys Leu Cys Met Cys Ile Phe Trp Glu Lys
35 40 45

Val

<210> 105

<211> 80

<212> PRT

<213> Homo sapiens

<400> 105

Met Gln Pro Gly Phe Leu Arg Ser Lys Phe Leu Ser Gln Ala Cys Pro
1 5 10 15

Glu Cys Lys Pro Leu Ser Ser Ile Gln Gly Phe Gln Ala Leu Ser Gly
20 25 30

Thr His Arg Cys Cys Trp Gln Gly Glu Glu Gly Ser Thr Ser Phe Gln
35 40 45

Leu Ser Cys Leu Leu Leu Val Leu Gln Gln Pro Val Leu Pro Leu Cys
50 55 60

Leu Cys Thr Cys Lys Ser Pro Cys Leu Asn Cys Leu Pro Gln Leu Ala
65 70 75 80

<210> 106

<211> 56

<212> PRT

<213> Homo sapiens

<400> 106

Met Ser Gln Pro Asp Phe Gln Ala Glu Leu Asp Trp Asn Arg His Gly
1 5 10 15

Leu Gly Gly Val Pro Val Pro Val His Cys Ser His Phe Arg Arg Glu
20 25 30

Arg Asp Pro Pro Gly Arg Ser Arg Gly Arg Ala Gly Thr Ala Leu Gly
35 40 45

Leu Leu Thr Trp Gln Ala Gln Gln
50 55

<210> 107

<211> 98

<212> PRT

<213> Homo sapiens

<400> 107

Met Thr Trp Cys Tyr Pro Thr Thr Val His Ile Leu Gly Gln Pro Leu
1 5 10 15

Ser Leu Glu Pro Val Leu Glu Gly Arg Met Ser Met Leu Asn Leu Ser
20 25 30

Leu Ile Gln Asp Asn Val Ala Ser Ile Leu Asp Ala Phe Ser Pro Leu
35 40 45

Phe Ser Glu Cys Leu Phe Thr Ser Glu Phe Thr Arg Arg Lys Ser Leu
50 55 60

Gly Glu Arg Val Gly Arg Gly Pro Leu Gly Pro Glu Asn Ser Trp Pro
65 70 75 80

Gly Gly Ala His Leu Trp Phe Phe Trp Leu Cys Asp Arg Val Thr Thr
85 90 95

Arg Gly

<210> 108

<211> 99

<212> PRT

<213> Homo sapiens

<400> 108

Met His Leu Pro Leu Ile Phe Pro Ser Ser Ser Ser Tyr Leu Leu
1 5 10 15

Ile Pro Pro Gly Leu Ser Val Leu Arg Gly Leu Glu Pro Leu Gly Tyr
20 25 30

Thr Asp Gly His Pro Thr Trp Glu Glu His His Val Ser Gly Asp Leu
35 40 45

Gly Ser Pro Cys Ser Val Phe Leu Ser Val Gly Ser Gln Leu Leu Glu
50 55 60

Leu Asn Met Pro Leu Ser Phe Ser Leu Leu Pro Gln Met Glu Thr Val

65

70

75

80

Leu Ala Lys Ile Phe Lys Ile Asp Ile Ile Glu Leu Lys Gly Asp Ile
 85 90 95

Val Gln Gly

<210> 109

<211> 64

<212> PRT

<213> Homo sapiens

<400> 109

Met Thr Ile Leu Cys Lys Asn Asn Phe Gln Val Phe Ser Gln Phe Leu
 1 5 10 15

Tyr Asn Leu Phe Pro Pro Ile Tyr Val Pro Lys Cys Asn Ser Ser Ser
 20 25 30

Cys Lys Asn Glu Glu Met Gly Gly Asn Val Gly Ala Phe Leu Phe Gln
 35 40 45

Asp Arg Lys Leu Lys His Lys Leu Ile Cys Met Lys Cys Phe Lys Ser
 50 55 60

<210> 110

<211> 35

<212> PRT

<213> Homo sapiens

<400> 110

Met Asn Ser Pro Ser Ala Gly Ser His Glu Thr Pro Leu Tyr Leu Gln
 1 5 10 15

Ile Gly Ser Leu Leu Thr Gln Arg Ser Gly Leu Glu Asn Thr Ile Gly
 20 25 30

Leu Lys Arg
 35

<210> 111

<211> 25
<212> PRT
<213> Homo sapiens

<400> 111
Met Ala Tyr Phe Leu Gly Thr Tyr Leu Ser Leu Ser Tyr Lys Phe Phe
1 5 10 15

Leu Ser Ile Tyr Phe Ile Lys Met Thr
20 25

<210> 112
<211> 18
<212> PRT
<213> Homo sapiens

<400> 112
Met Ser Ala Ile Gln Thr Asp Arg Phe Leu Ser Ser Val Glu Met Arg
1 5 10 15

Leu Phe

<210> 113
<211> 128
<212> PRT
<213> Homo sapiens

<400> 113
Gly Thr Val Val Gly Val Asp Glu Ser Thr Ala Phe Ser Trp Pro Val
1 5 10 15

Cys Asp Met Cys Gly Asn Gly Arg Leu Glu Gln Arg Pro Glu Asp Arg
20 25 30

Gly Ala Phe Ser Cys Gly Asp Cys Ser Arg Val Val Thr Ser Pro Val
35 40 45

Leu Lys Arg His Leu Gln Val Phe Leu Asp Cys Arg Ser Arg Pro Gln
50 55 60

Cys Arg Val Lys Val Lys Leu Leu Gln Arg Ser Ile Ser Ser Leu Leu
65 70 75 80

Arg Phe Ala Ala Gly Glu Asp Gly Val Ser Ala Gly Gly Pro Ala Gln
85 90 95

Gly Ala Ala His Ser Val Ala Cys Met Ser Asn Ser Ser Pro Glu Glu
100 105 110

Ala Pro Thr Pro Lys Cys Val Leu Leu Gln Pro Ile Pro Leu Gly Ser
115 120 125

<210> 114
<211> 79
<212> PRT
<213> Homo sapiens

<400> 114
Met Val Ala Leu Gly Ala Ser Thr His His Leu Thr Ser Ala Arg Phe
1 5 10 15

Val Leu Glu Glu Gly Gly Phe Leu Arg Asp Gly Gly Leu Leu Gly Lys
20 25 30

Ala Lys Gly Cys Ile Ala Ala Glu Arg Phe Glu Pro Gln Phe Gly Gly
35 40 45

His Val Leu Cys Pro Ala Pro Pro Ser Leu Gly Arg Arg Asn Arg Leu
50 55 60

Leu Val Lys Trp Glu Ile Gly Phe Pro Gly Ala Pro Leu Arg Pro
65 70 75

<210> 115
<211> 18
<212> PRT
<213> Homo sapiens

<400> 115
Met Phe Pro Tyr Phe Val Cys Leu Cys Gly His Leu Ala Phe Leu Trp
1 5 10 15

His Arg

<210> 116
<211> 66

<212> PRT

<213> Homo sapiens

<400> 116

Met Leu Ser Ala Gln Ile Gln Leu Ala Thr Phe Tyr Cys Thr Thr His
1 5 10 15

Thr Cys Asn Ala Val Tyr Leu Lys Thr Asn Leu Lys Glu Met Glu Asn
20 25 30

Arg Lys Thr Phe Ser Pro Val Asn Phe Tyr Lys Ser Gln Glu Gly Phe
35 40 45

His Tyr Lys Val Gly Ile Thr Asn Ser Arg Gly Lys Lys Val Arg Asn
50 55 60

Lys Asp
65

<210> 117

<211> 20

<212> PRT

<213> Homo sapiens

<400> 117

Met Ile Ser Ile Lys Lys Gln Val Leu Tyr Leu Cys Phe Thr Gln Asn
1 5 10 15

Lys Ile Leu Val
20

<210> 118

<211> 595

<212> PRT

<213> Homo sapiens

<400> 118

Met Lys Phe Phe Ser Tyr Ile Leu Val Tyr Arg Arg Phe Leu Phe Val
1 5 10 15

Val Phe Thr Val Leu Val Leu Leu Pro Leu Pro Ile Val Leu His Thr
20 25 30

Lys Glu Ala Glu Cys Ala Tyr Thr Leu Phe Val Val Ala Thr Phe Trp
35 40 45

Leu Thr Glu Ala Leu Pro Leu Ser Val Thr Ala Leu Leu Pro Ser Leu
 50 55 60

Met Leu Pro Met Phe Gly Ile Met Pro Ser Lys Lys Val Ala Ser Ala
 65 70 75 80

Tyr Phe Lys Asp Phe His Leu Leu Leu Ile Gly Val Ile Cys Leu Ala
 85 90 95

Thr Ser Ile Glu Lys Trp Asn Leu His Lys Arg Ile Ala Leu Lys Met
 100 105 110

Val Met Met Val Gly Val Asn Pro Ala Trp Leu Thr Leu Gly Phe Met
 115 120 125

Ser Ser Thr Ala Phe Leu Ser Met Trp Leu Ser Asn Thr Ser Thr Ala
 130 135 140

Ala Met Val Met Pro Ile Ala Glu Ala Val Val Gln Gln Ile Ile Asn
 145 150 155 160

Ala Glu Ala Glu Val Glu Ala Thr Gln Met Thr Tyr Phe Asn Gly Ser
 165 170 175

Thr Asn His Gly Leu Glu Ile Asp Glu Ser Val Asn Gly His Glu Ile
 180 185 190

Asn Glu Arg Lys Glu Lys Thr Lys Pro Val Pro Gly Tyr Asn Asn Asp
 195 200 205

Thr Gly Lys Ile Ser Ser Lys Val Glu Leu Glu Lys Asn Ser Gly Met
 210 215 220

Arg Thr Lys Tyr Arg Thr Lys Lys Gly His Val Thr Arg Lys Leu Thr
 225 230 235 240

Cys Leu Cys Ile Ala Tyr Ser Ser Thr Ile Gly Gly Leu Thr Thr Ile
 245 250 255

Thr Gly Thr Ser Thr Asn Leu Ile Phe Ala Glu Tyr Phe Asn Thr Arg
 260 265 270

Tyr Pro Asp Cys Arg Cys Leu Asn Phe Gly Ser Trp Phe Thr Phe Ser
 275 280 285

Phe Pro Ala Ala Leu Ile Ile Leu Leu Leu Ser Trp Ile Trp Leu Gln
 290 295 300

Trp Leu Phe Leu Gly Phe Asn Phe Lys Glu Met Phe Lys Cys Gly Lys
 305 310 315 320
 Thr Lys Thr Val Gln Gln Lys Ala Cys Ala Glu Val Ile Lys Gln Glu
 325 330 335
 Tyr Gln Lys Leu Gly Pro Ile Arg Tyr Gln Glu Ile Val Thr Leu Val
 340 345 350
 Leu Phe Ile Ile Met Ala Leu Leu Trp Phe Ser Arg Asp Pro Gly Phe
 355 360 365
 Val Pro Gly Trp Ser Ala Leu Phe Ser Glu Tyr Pro Gly Phe Ala Thr
 370 375 380
 Asp Ser Thr Val Ala Leu Leu Ile Gly Leu Leu Phe Phe Leu Ile Pro
 385 390 395 400
 Ala Lys Thr Leu Thr Lys Thr Thr Pro Thr Gly Glu Ile Val Ala Phe
 405 410 415
 Asp Tyr Ser Pro Leu Ile Thr Trp Lys Glu Phe Gln Ser Phe Met Pro
 420 425 430
 Trp Asp Ile Ala Ile Leu Val Gly Gly Gly Phe Ala Leu Ala Asp Gly
 435 440 445
 Cys Glu Glu Ser Gly Leu Ser Lys Trp Ile Gly Asn Lys Leu Ser Pro
 450 455 460
 Leu Gly Ser Leu Pro Ala Trp Leu Ile Ile Leu Ile Ser Ser Leu Met
 465 470 475 480
 Val Thr Ser Leu Thr Glu Val Ala Ser Asn Pro Ala Thr Ile Thr Leu
 485 490 495
 Phe Leu Pro Ile Leu Ser Pro Leu Ala Glu Ala Ile His Val Asn Pro
 500 505 510
 Leu Tyr Ile Leu Ile Pro Ser Thr Leu Cys Thr Ser Phe Ala Phe Leu
 515 520 525
 Leu Pro Val Ala Asn Pro Pro Asn Ala Ile Val Phe Ser Tyr Gly His
 530 535 540
 Leu Lys Val Ile Asp Met Val Lys Ala Gly Leu Gly Val Asn Ile Val
 545 550 555 560

Gly Val Ala Val Val Met Leu Gly Ile Cys Thr Trp Ile Val Pro Met
565 570 575

Phe Asp Leu Tyr Thr Tyr Pro Ser Trp Ala Pro Ala Met Ser Asn Glu
580 585 590

Thr Met Pro
595

<210> 119
<211> 53
<212> PRT
<213> Homo sapiens

<400> 119
Met Gly Ile Cys Phe Cys Thr Cys Cys Lys Arg Lys Ile Val Lys Leu
1 5 10 15

Gln Glu Thr Lys Glu Lys Gly Lys Glu Glu Arg Lys Gly Phe Gly Ile
20 25 30

Leu Leu Lys Lys Phe Leu Tyr Leu Lys Arg Phe His Gln Cys Glu Phe
35 40 45

Pro Asn Leu Val Ile
50

<210> 120
<211> 88
<212> PRT
<213> Homo sapiens

<400> 120
Met Phe Val Thr Ala Phe Ala Ser Asn Pro Pro Thr Pro Ala Ala Asp
1 5 10 15

Leu Thr Val Cys Arg Leu Arg Gln Leu His Ala Thr Arg Ser Val Val
20 25 30

Leu Asn Cys Leu Pro Thr Cys Ala Arg Val Asn Ile Trp Gly Val Gly
35 40 45

Gly Trp Val Gly Gly Gly Gln Arg Glu Glu Arg Gly Gly Val Cys Val
50 55 60

Gly Cys Gly Ala Arg Val Glu Pro Leu Met Ile Lys Asp Ile Ile Gly

65

70

75

80

Leu Lys Leu Pro Leu Tyr Thr Phe

85

<210> 121

<211> 50

<212> PRT

<213> Homo sapiens

<400> 121

Met Val Ile Leu Arg Leu Ala Leu Leu Met Arg Ala Leu Asn Leu Ala

1

5

10

15

Thr Glu Ala Val Thr Gly Thr Glu Phe Leu Pro Gly Asn Asp Asp Ser

20

25

30

Val Leu Arg Arg Arg Arg Gln Asn Leu Pro Asp Leu His Leu Leu Lys

35

40

45

Gln Asn

50

<210> 122

<211> 90

<212> PRT

<213> Homo sapiens

<400> 122

Met Ser Leu Lys Val Val Tyr Gly Thr Ser Ser Val Arg Glu Thr Ser

1

5

10

15

Ile Glu Val Pro Arg Ala Leu Ile Thr Lys Asn Glu Asp Gly Ala Lys

20

25

30

Asn Glu Thr Cys Tyr Leu Val Arg Tyr Thr Arg Pro Thr Ser Asn Ser

35

40

45

Leu Val Cys Phe Glu Arg Trp Leu Leu Ile Glu Gly Gln Trp Trp Trp

50

55

60

Val Asn Ser Ile Phe Ile Ala Arg Ser His Val Arg His Gly His Gly

65

70

75

80

Lys Glu Ala Ile Gly Phe Arg Ile Ala Asp

85

90

<210> 123
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (8) .. (14)

<400> 123
Met Ile Ala Cys Tyr Glu Glu Xaa Xaa Xaa Xaa Xaa Xaa Ser Ser
1 5 10 15
Ser Phe Leu Ala Leu Gln Arg Asn Leu Gly Gly Ala Ser Ala Pro Ala
20 25 30
Leu Leu Asn Arg Pro Ser Leu Ser His Gln His Arg Val Ser Ile Ser
35 40 45
Pro His Tyr Arg Ala Lys Val
50 55

<210> 124
<211> 134
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (28)

<400> 124
Met Arg Ala Leu Asn Leu Ala Thr Glu Ala Val Thr Gly Thr Glu Phe
1 5 10 15
Leu Pro Gly Asn Asp Asp Ser Val Leu Arg Arg Xaa Arg Glu Gln His
20 25 30
Ala Gly Tyr Pro Cys Ile Arg Cys Arg Thr Leu Val Ala Asn Val Ala
35 40 45
Arg Ser Phe Ser Tyr Gly Val Ile Pro Phe Phe Phe Ala Leu Arg Leu
50 55 60
Arg Phe Ser Phe Cys Pro Tyr Gln Leu Pro Ala Pro Ser Pro Phe Leu

65	70	75	80
Pro Asp Leu Ile Tyr Gly Arg Val Pro Arg Leu Leu Ser Cys Ser Pro			
	85	90	95
Leu Arg Gln Val Ser Ala Ala Cys Ala Gly Phe Arg Pro Gln Ala Tyr			
	100	105	110
Pro Pro Leu Ser Cys Gly Thr Ala Pro Thr Ser Pro His His Ile Pro			
	115	120	125
Leu Gly Cys Arg Gly Arg			
	130		
<210> 125			
<211> 199			
<212> PRT			
<213> Homo sapiens			
<400> 125			
Pro Thr Ser Cys Ala Ile Ala Ile Pro Ala Gly Pro Asp Leu Arg Pro			
1	5	10	15
Cys Pro Pro Phe Ala Ala Ala Ala Leu Pro Ala Gly Arg Phe Pro Pro			
	20	25	30
Leu Ala Pro Val Leu Gly Arg Arg Pro Thr Pro Pro Phe Pro Val Tyr			
	35	40	45
Gly Pro Tyr Ala Pro Pro Ser His Pro Pro Trp Leu Pro Gly Pro Leu			
	50	55	60
Ala Val Thr Pro Pro Phe Pro Thr Ala Thr Leu Thr Leu Trp Ala Ser			
65	70	75	80
Pro Arg Ala Pro Trp Pro Leu Ala Ala Val Val Val Phe Pro Phe His			
	85	90	95
Gln Ser Pro Phe Ser Phe Gln Pro Gly Ser Ser Arg Arg Pro Pro Val			
	100	105	110
Gln Leu Pro Ser Val Pro Pro Ser Pro Leu Pro Arg Ser Pro Leu Cys			
	115	120	125
Arg Gly Ser Ala Thr Pro Ser Pro Pro Pro Ser Pro Leu Ala Phe Ala			
	130	135	140

Pro Cys Ser Pro Arg Pro Arg Ser Pro Pro Ala Arg Arg Phe Pro Ala
145 150 155 160

Ala Tyr Pro Leu Ser Pro Gly Pro Ser Pro His Pro Ala Ser Pro Arg
165 170 175

Pro Pro Pro Gln Pro Ala Ala Pro Asn Pro Phe Pro Arg Pro Pro Pro
180 185 190

Leu Leu Leu Thr Pro Ser Pro
195

<210> 126

<211> 55

<212> PRT

<213> Homo sapiens

<400> 126

Met Val Glu Val Val Thr Leu Leu Pro Asp Thr Asn Pro Ala Gly Thr
1 5 10 15

Ala Gly Cys Pro Ser Phe Phe Val Ala Arg Tyr His Arg Phe Pro Glu
20 25 30

Gly Ile Pro Phe Gln Leu Leu Pro Gln Leu Leu Asn Leu Glu His Ala
35 40 45

Ser Glu Ala Leu Thr Ser Gly
50 55

<210> 127

<211> 19

<212> PRT

<213> Homo sapiens

<400> 127

Met His Ala Thr Arg Thr Leu Val Leu Asn Cys Leu Pro Trp Cys Ala
1 5 10 15

Arg Val Met

<210> 128

<211> 113

<212> PRT

<213> Homo sapiens

<400> 128

Met Leu Thr Met Ala Pro Pro Tyr Phe Ser Pro Ser Pro Pro Pro Pro
1 5 10 15

Phe Val Leu Ala Arg Cys Pro Gly Pro Pro Gly Ala Phe Val Leu His
20 25 30

Leu Pro Phe His His Ser Ser Thr Phe Ser Phe Gly His Leu Pro Pro
35 40 45

Leu Ser Ser Pro Arg Phe Val Phe Met Phe Pro Ser Cys Pro Val Leu
50 55 60

Ser Leu Phe Leu Ile Lys Phe Cys Thr Ala Pro Ser Gly Ala Ala Pro
65 70 75 80

Phe Ser Trp Ser Val Ala Thr Leu Gln Pro Leu Pro Ala Leu Arg Pro
85 90 95

Leu Phe Pro Pro Leu His Val Leu Val Ser Leu Ser Val Pro His Ala
100 105 110

Arg

<210> 129

<211> 59

<212> PRT

<213> Homo sapiens

<400> 129

Met Lys Thr Arg Gly Gln Arg Asp Arg Gly Met Pro Thr Ser Val Gly
1 5 10 15

Gly Glu Gly Gly Phe Thr Ala Asn Pro Val Arg His Arg Trp Arg Gly
20 25 30

Lys Ala Ala Gln Asn Ile Ala Leu Ala Pro Arg Arg Val Arg Arg Ala
35 40 45

Gly Asn Ala Pro Ile Leu Ala Gly Ser Arg Gln
50 55

<210> 130

<211> 58
<212> PRT
<213> Homo sapiens

<400> 130
Met Tyr Arg Tyr Arg Arg Phe Ile Ile Pro Tyr Pro His Val Gly Cys
1 5 10 15
Arg Tyr Pro Leu His Phe Asp Thr Arg Cys Cys Ala Ser Ile Met Val
20 25 30
Ile Thr Cys Phe Cys Val Leu Val Leu Asn Asn Tyr Leu Met Leu Phe
35 40 45
Ala Phe Ile Phe Asp Ile Cys Leu Gln Leu
50 55

<210> 131
<211> 57
<212> PRT
<213> Homo sapiens

<400> 131
Met Leu Glu Asn Cys Glu Ile Phe Cys Gly Ala Ala Trp Ala Gln Leu
1 5 10 15
Leu Lys Trp Thr Leu Lys Leu Glu Val Thr Trp Ala Thr Thr Ala Tyr
20 25 30
Arg Arg Ser Asn Glu Thr Arg Asp Asn Val Arg Leu Val Glu Arg Glu
35 40 45
Ala Gly Lys Gln Lys Ala Gly Trp Thr
50 55

<210> 132
<211> 87
<212> PRT
<213> Homo sapiens

<400> 132
Met Tyr Phe Gln Ser Pro Asn Val Leu Thr Pro Pro Gly Phe Leu Thr
1 5 10 15
Trp Tyr Phe Val Tyr Lys Arg Gly His Gln Val Ala Ser Ser Ser Pro
20 25 30

Val Met Leu Ser Arg His Val Arg Gln Leu Val Arg Leu Pro His Tyr
35 40 45

Phe Gln His Tyr Leu Ala His Cys Pro Ser Phe Tyr Ala Pro Val Leu
50 55 60

Leu Ser Phe Leu Phe Thr Leu Phe Tyr Pro Leu Pro Leu Pro Pro Ala
65 70 75 80

Ile Gly Phe Arg Ile Ala Asp
85

<210> 133

<211> 24

<212> PRT

<213> Homo sapiens

<400> 133

Met Val Arg Leu Ile Leu Leu Ile Met Arg Tyr Asn Tyr Thr Ala Asn
1 5 10 15

Val Pro Pro Thr Pro Thr Trp His
20

<210> 134

<211> 78

<212> PRT

<213> Homo sapiens

<400> 134

Met Val Gly Ser Glu Arg Thr Cys Val Gly Arg Arg Arg Arg Arg Arg
1 5 10 15

Asp Asp His Leu Pro Asp Arg Pro Gly Arg Arg Leu Pro Ile Arg Ala
20 25 30

Pro Val Val Leu His His Leu Tyr Glu Ser Pro Gly Cys Asn Glu Gln
35 40 45

Leu Gly Leu Pro Arg Ile Ser Thr His Gln Ile Arg Leu Pro Gly Leu
50 55 60

Lys Arg Asp Ile Arg Arg Cys Gly Leu Arg Arg Arg Gln Arg
65 70 75

<210> 135
<211> 46
<212> PRT
<213> Homo sapiens

<400> 135
Met Gln His Ile Arg Arg Thr Arg Arg Cys Arg Arg Ile Arg Pro Ile
1 5 10 15
Arg Ser Ile Arg Gln Ala Arg Cys Gln Arg Arg Arg Arg Arg Arg
20 25 30
Ser Arg Arg Ser Gln Arg Gln Ala Arg Pro Met Pro Ala Asn
35 40 45

<210> 136
<211> 145
<212> PRT
<213> Homo sapiens

<400> 136
Met Gly Ile Pro Asn Met Ser Arg Val Ala Thr Ala Ser Phe Ser Leu
1 5 10 15
Ser Leu Val Leu Leu Ala Ile Ile Leu Pro Val Ser Ala Thr Thr Ala
20 25 30
Thr Leu Leu Ala Pro Ile Ala Ala Ala Leu Thr Val Val Ile Thr Ile
35 40 45
Ala Thr Leu Ala Ser Ile Thr Leu Val Leu Pro Leu Thr Leu Arg Val
50 55 60
Val Thr Phe Arg Lys Cys Cys Glu Thr Ala Val Val Gln Arg Lys Ile
65 70 75 80
Val Arg Tyr Cys Pro Tyr Thr Arg Thr Ala Tyr Arg Gly Val Pro His
85 90 95
Phe Leu Val Val Pro Ala Ile Ile Thr Gly Ile Leu Pro Leu Leu Leu
100 105 110
Ser Thr Ile Gln Leu Arg Thr Pro Leu Thr Ala Ala Leu Asn Cys Cys
115 120 125
Val Pro Pro Ser Ser Ser Thr Asp Ser Leu Ser Ser Trp Leu Thr Ser

130

135

140

Gly
145

<210> 137
<211> 74
<212> PRT
<213> Homo sapiens

<400> 137
Met Gly Ala Thr Ala Ala Leu Pro Ala Val Met Ala Tyr Pro Leu Gly
1 5 10 15

Gly Lys Thr Phe Asp Gly Pro Arg Ala Gly Thr Gly Pro Leu Met Leu
20 25 30

Tyr Ile Thr Gln Phe Val Ile Ser Pro Ala Ala Ala Ile Leu Leu Thr
35 40 45

Thr Ser Ala Ala Ile Val Ile Thr Ala Leu Phe Ser Ala Ala Ala Phe
50 55 60

Gly Val Val Phe Val Leu Cys Phe Gly Gly
65 70

<210> 138
<211> 50
<212> PRT
<213> Homo sapiens

<400> 138
Met Ser Thr Val Pro Glu Ile Gly Glu Ser Val Thr Gly Gln Glu Cys
1 5 10 15

Gly Ser Arg Lys Ile Leu Leu Val Trp Arg Arg Leu Arg Lys Cys Thr
20 25 30

Thr Thr Glu Cys Leu Pro Gly Ala Lys Val Thr Thr Gly Tyr Tyr Lys
35 40 45

Arg Lys
50

<210> 139

<211> 92
<212> PRT
<213> Homo sapiens

<400> 139
Met Thr Leu Lys Ser Thr Ser Trp Ser Gly Gly Cys Ser Val Leu Gly
1 5 10 15
Ser Leu His Lys Pro Pro Pro Pro Gln Arg Ala Pro Cys Ser Leu Glu
20 25 30
Glu Arg Thr Thr Val Leu Gly Gln Glu Arg Pro Phe Ser Tyr Ser Trp
35 40 45
Thr Met Asp Arg Lys Gln Leu Gly Ala Asp Phe Leu Cys Ala Thr Cys
50 55 60
Gln Arg Leu Leu Ser Ser Ile Ala Arg Ile Gln Arg Pro Asp Ser Ala
65 70 75 80
Leu Val Glu Val Lys Val Phe Phe Pro Ser Pro Phe
85 90

<210> 140
<211> 63
<212> PRT
<213> Homo sapiens

<400> 140
Met Arg Val Ile Met Leu Gln Ser Thr Cys Ile Arg Leu His Asp Leu
1 5 10 15
Arg Lys Val Asp Ser Val Thr Leu Lys Ser Ser Ile Leu Glu Arg Arg
20 25 30
Asn Met Leu Phe Asp Asp Ile Ala Gln Lys Leu Val Glu Ile Ser Leu
35 40 45
Glu Leu Glu Met Ser Arg Ala Ser His Gln Asn Val Leu Lys Asn
50 55 60

<210> 141
<211> 16
<212> PRT
<213> Homo sapiens

<400> 141

Met Phe Pro Phe Val Cys Arg Ser Lys Asn Ser Pro Gln Val Tyr Cys
1 5 10 15

<210> 142

<211> 30

<212> PRT

<213> Homo sapiens

<400> 142

Met Asn Glu Ala Val Ala Lys Trp Ala Gln Pro Gly Arg Leu Pro His
1 5 10 15

Ile Pro Arg Trp Leu Ser Cys Gln Leu Trp Val Ser Arg Thr
20 25 30